

Pseudomonas, Bacillus, Escherichia, Enterococcus, and Klebsiella;

Revised.  
exposing said bacteria to biological, chemical or physical stress so that the bacteria release a stress release product;

[collecting said supernatant,] separating said medium and stress release product from said bacteria to form a filtered product;

and;

administering [said supernatant-] said filtered product to said animal.

2  
3. (Amended)

to  
The method of claim 1 wherein <sup>the</sup> said step of stressing said bacteria is selected from the group consisting of:  
altering the pH of said media to affect the bioavailability of nutrients in said media,  
removing nutrients from said media,  
crowding by reducing the volume of said media, [or by] adding additional bacterial to said media, and  
removing said bacteria from said media by centrifugation and resuspending said bacteria in a non-nutritive isotonic solution.

[ Please cancel claim 5. ✓

4

3

(Amended)

A<sup>13</sup>

The method of claim 3 wherein said non-nutritive isotonic solution is 0.1M phosphate buffer[,] having a pH of 7.5.

Please cancel claims 8-14 without prejudice as being drawn to a non-elected invention.

Please cancel claims 15-23.

Please enter new claims 24-34 into the record:

24. (New)

A method for modulating the immune system of an animal comprising:  
administering to said animal a product released by bacteria in response to stress, wherein the product comprises stress response factors of a size less than 10 kDa, and further providing that the bacteria is of a class selected from the group consisting of *Lactobacillus*, *Staphylococcus*, *Streptococcus*, *Pseudomonas*, *Bacillus*, *Escherichia*, *Enterococcus*, and *Klebsiella*;  
and further providing that the product is administered to the animal in a delivery form selected from the group consisting of gels for oral delivery, lozenges for oral delivery, nasal sprays, ear drops, vaginal creams, vaginal suppositories, and topical ointments.

contd.  
7  
br

6  
5 25. (New)

The method of claim 24 wherein said animal is selected from the group consisting of humans, poultry and livestock.

7  
5 26. (New)

B

The method of claim 24 wherein <sup>said stress release product</sup> ~~the product~~ is administered in a concentration of about 1000 to 50,000 AU of <sup>said stress release product</sup> ~~stress factors~~/ml.

B  
4  
contd.

27. (New)

The method of claim 24 wherein the product is administered in a delivery form selected from the group consisting of gels for oral delivery, lozenges for oral delivery, nasal sprays, ear drops, vaginal creams, vaginal suppositories, and topical ointments.

8  
7 28. (New)

B

The method of claim 26 wherein <sup>said stress release product</sup> ~~the product~~ is administered orally or parenterally.

9  
5 29. (New)

A

B

The method of claim 24 wherein the stress release <sup>product has</sup> ~~factors~~ have a size of between 0.5 and 3 kDa.

10  
5 30. (New)

B

The method of claim 24 wherein <sup>said stress release product</sup> ~~the product~~ is administered daily for five consecutive days.

26

11  
31. (New)

said stress release product

B The method of claim 24 wherein the product is  
administered with a killed pathogen to produce higher levels  
of circulating antibodies against the killed pathogen.

32. (New)

A method of maintaining the viability of starter bacteria  
in during storage and shipment comprising:  
administering to said starter bacteria a product released by  
bacteria in response to stress, wherein the product  
comprises stress response factors of a size less than 10  
kDa, and further providing that the bacteria is of a  
class selected from the group consisting of  
Lactobacillus, Staphylococcus, Streptococcus,  
Pseudomonas, Bacillus, Escherichia, and Klebsiella.

4  
A Contd.  
sub B37

13  
33. (New)

The method according to claim 1 wherein the bacteria is  
selected from the group consisting of L. acidophilus, L.  
caseii, L. fermentum, L. plantarum, L. monocytogenes, S.  
aureus, S. typhimurium, P. acidolactici, B. coryneforme, E.  
coli, E. faecium, S. pyogenes, and K. pneumoniae.

pneumoniae

34. (New)

A method for activating and modulating the immune system of an animal comprising:  
growing bacteria in a medium, wherein the bacteria is selected from the group consisting of *L. acidophilus*, *L. caseii*, *L. fermentum*, *L. plantarum*, *L. monocytogenes*, *S. aureus*, *S. typhimurium*, *P. acidolactici*, *B. coryneforme*, *E. coli*, *E. faecium*, *S. pyogenes*, and *K. pneumoniae*.;  
exposing said bacteria to biological, chemical or physical stress such that the bacteria release a stress release product;  
filtering the bacteria from the medium and stress release product to form a filtered product;  
administering the filtered product to said animal.

4 per B47  
Revised

#### REMARKS

##### Election/Restriction Requirement

In response to the Examiner's restriction requirement, Applicant hereby elects to prosecute claims 1-7 and 15-23 without prejudice.

##### Claim Objections

Claim 18 was objected to as having an improper Markush format. Claim 18 has now been canceled, thus rendering this ground of objection moot.